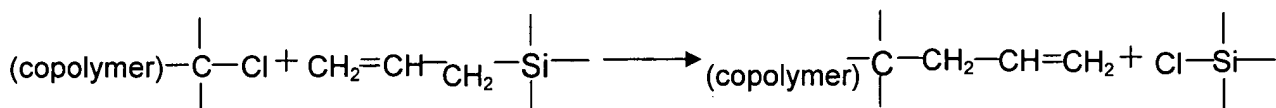


REMARKS

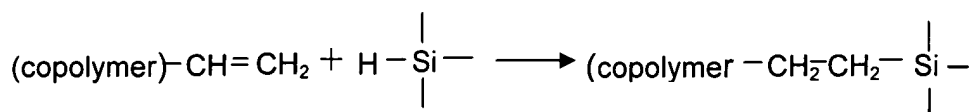
The rejection of Claim 1 as indefinite is noted and acknowledged. Claim 1 has been rewritten in amended form to clarify the difference between the components (A) and (B) insofar as "at least one of an aromatic vinyl-containing thermoplastic elastomer and an olefinic resin is concerned. As such, it is respectfully submitted that 35 the U.S.C. §112, second paragraph, rejection should be withdrawn.

With regard to prior art rejections, claims 1-18 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Hiiro et al. For the following reasons, it is respectfully submitted that this rejection is improper and should also be withdrawn.

Hiiro et al discloses a process for producing an alkenyl-containing isobutylene group block copolymer by a reaction between an isobutylene group block copolymer and an alkenyl group-containing silicon compound. In the reaction, an alkenyl group is introduced into the isobutylene group block copolymer by an addition of the alkenyl group of the silicon compound to the isobutylene group block copolymer and an elimination of a silicon group of the silicon compound, as illustrated below:



Hiiro et al also discloses a process to produce a reactive silicon group-containing isobutylene group block copolymer by a reaction between an alkenyl-containing isobutylene group block copolymer and an hydrosilyl compound. In the reaction a silicon group is introduced into the isobutylene group block copolymer by hydrosilylation between the alkenyl group of the alkenyl group-containing isobutylene group block copolymer and the hydrosilyl compound, as illustrated below:



Hiroyuki et al does not disclose a dynamic crosslinking reaction or a crosslinking reaction by hydrosilylation. The dynamic crosslinking of the claimed invention is a reaction that proceeds during melt-kneading of components by an extruder. As described at page 12, line 21 to page 13, line 6 of the applicants' specification, dynamic crosslinking is different from conventional chemical crosslinking (static crosslinking), and thermoplasticity is exhibited by the dynamic crosslinking, but not by the static crosslinking. The character of a composition obtained by dynamic crosslinking in the present invention is completely different from that obtained by conventional chemical crosslinking. Furthermore, when dynamic crosslinking proceeds in the presence of a matrix resin (an aromatic vinyl-containing thermoplastic elastomer and/or an olefinic resin), as in the present invention, semi-interpenetrating networks are formed at the interface between an alkenyl-containing isobutylene group block copolymer and matrix resin. As a result, the composition shows elasticity.

For the aforescribed reasons, it is important in the claimed invention to dynamically crosslink an isobutylene polymer having an alkenyl group with a hydrosilyl group-containing compound while melt-kneading in the presence of an aromatic vinyl-containing thermoplastic elastomer or an olefinic resin in component (A). It is also important to mix component (B) with the already dynamically crosslinked component (A). The two-stage composition claimed makes it possible to increase the reaction rate of the crosslinking reaction and control properties of the finally obtained thermoplastic elastomer composition within a wide range by selecting the kinds and molecular weights of the component (B), as described in page 19, line 14 to page 20, line 9 of the specification.

Hiiro et al explains a polymerization process of the isobutylene group block copolymer at column 9, lines 22-34 and a process of introduction of the alkenyl group to the block copolymer at column 10, lines 64-67. As the description at column 10, lines 47-52 points out, the isobutylene group block copolymer is preferably mixed under cooling during the polymerization. The Examiner contends that "It would have been obvious to one of ordinary skill in the art to consider that a polymer block (b) in Hiiro et al can be produced in separate stage, and then an alkenyl terminated isobutylene block (a) is melt-kneaded with a polymer block (b) for a component (A)". However, in Hiiro et al there is neither description nor suggestion of melt-kneading or a polymerization process under melt-kneading. Accordingly, one skilled in the art could not contemplate the present invention from studying Hiiro et al unless inspired by the claimed invention.

Claims 1-18 were also rejected under 35 U.S.C. §102(b) as allegedly anticipated by EP 0844257 ('257 patent) or JP 262788/1986 ('788 application). Applicants submit that each of these rejections is also improper and should be withdrawn.

With respect to the rejection over EP'267, that reference discloses a curable composition comprising (A) an isobutylene polymer having an alkenyl group, (B) a curing agent having at least two hydrosilyl groups, (C) a hydrosilylation catalyst, and (D) organic compound having an alkenyl or alkynyl group. The alkenyl groups of component (A) and (D) react with the hydrosilyl group of component (B) by hydrosilylation. However, there is no dynamic crosslinking. The hydrosilylation is static, as shown in Example 1. EP'257 does not disclose the dynamic crosslinking or mixing after crosslinking. In addition, EP'257 does

not suggest the dynamic crosslinking effects achieved by the claimed invention.

Accordingly, applicants submit that the present invention cannot be anticipated by EP'257.

With respect to the rejection over JP'788, that reference discloses a thermoplastic composition comprising a graft copolymer and thermoplastic resin, wherein the graft copolymer comprises a composite rubber and a vinyl group monomer and the composite rubber is obtained by crosslinking and/or grafting an isobutylene group polymer segment and a vinyl group polymer segment using a crosslinking agent and/or a grafting agent. However, again the crosslinking is static. Furthermore, as stated in the JP'788 specification at page 24, lines 7 to 12, "Also from the point of maintaining the inherent characteristics of thermoplastic resin, it is desirable that the amount of at least one of the composite rubber and graft copolymer is adjusted to not more than 70% by weight ...". The thermoplasticity of the thermoplastic composition of JP'788 is an inherent characteristic of the thermoplastic resin and the amount of the graft copolymer is limited to maintain the thermoplasticity.

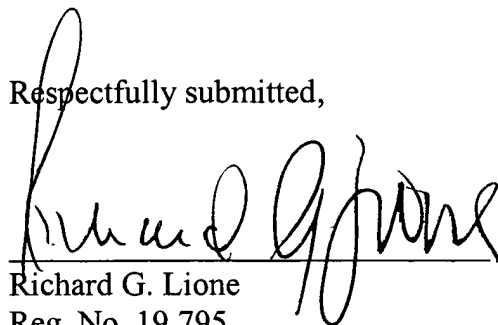
In contrast to the JP'788 composition, the component (A) of the present invention shows thermoplasticity after dynamic crosslinking. As such, the component (A) of the claimed invention is completely different from the graft copolymer and the thermoplastic composition of JP'788.

JP'788 discloses neither dynamic crosslinking nor mixing after crosslinking. In addition, JP'788 does not teach or suggest the effects achieved by the claimed composition. Accordingly, the present invention is not anticipated by JP'788.

Claim 1 is the only independent claim in the application. For the reasons hereinbefore presented, applicants submit that its subject matter is neither anticipated nor

rendered obvious by any prior art reference or references. As such, Claim 1 and dependent Claims 2-18 should be allowable.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Richard G. Lione", written over a horizontal line.

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